

**ABSTRACT OF THE DISCLOSURE****PRACTICAL METHODOLOGY FOR EARLY BUFFER AND WIRE RESOURCE ALLOCATION**

A method, system, and computer program product for  
5 allocating buffer and wire placement in an integrated  
circuit design is provided. In one embodiment, the  
surface of a integrated circuit design is represented as  
a tile graph. Allocation of buffer locations for  
selected tiles in the tile graph is then received and  
10 nets are routed between associated sources and sinks.  
Buffer locations within selected tiles are then  
selectively assigned based upon buffer needs of the nets,  
wherein the nets are routed through selected tiles and  
assigned buffer locations using a cost minimization  
15 algorithm.

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